

What is claimed is:

- 1 1. A system of inclined geosynchronous
2 satellite orbits above a landmass comprising:
3 a service area on a surface of the earth
4 having a predetermined minimum elevation angle from
5 the horizon;
6 a satellite having an orbit with respect to
7 the earth having sky track when viewed from within
8 said service area; and
9 an operating arc defined by a subset of
10 points on said sky track over said service area, said
11 satellite operating on said operating arc.
- 1 2. A system as recited in claim 1 wherein
2 said orbit has a predetermined inclination with
3 respect to an equatorial plane of the earth.
- 1 3. A system as recited in claim 1 wherein
2 said orbit has a predetermined eccentricity.
- 1 4. A system as recited in claim 3 wherein
2 said orbit has an eccentricity factor between about
3 0.1 and 0.5.
- 1 5. A system as recited in claim 1 wherein
2 said minimum elevation angle is greater than thirty
3 degrees.

1 6. A system as recited in claim 1 wherein
2 said minimum elevation angle is greater than sixty
3 degrees.

1 7. A system as recited in claim 1 wherein
2 in said orbital track having an apogee and a perigee,
3 said apogee is over said service area.